

# i30N OIL COOLER FITTING INSTRUCTIONS

## Tools needed:

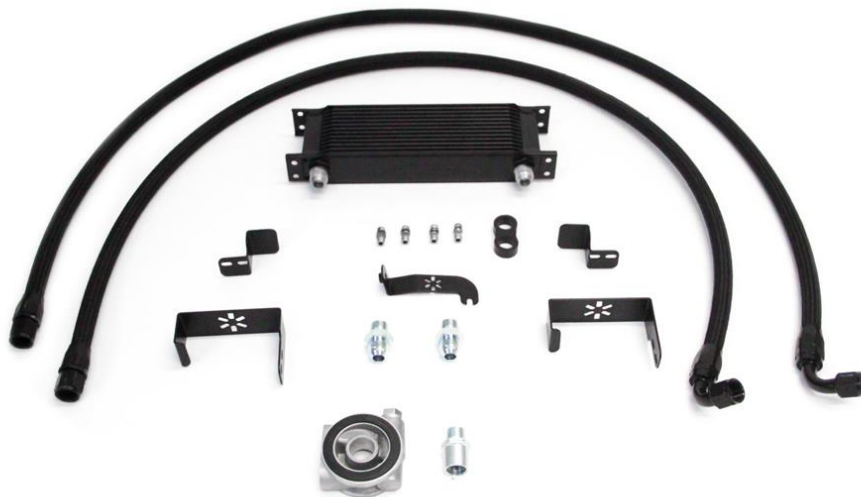
- *Socket set*
- *10mm spanner*
- *Oil filter wrench*
- *5mm Allen key*
- *Trim tool*
- *Container to catch used oil*

## Other parts needed:

- *Fresh oil of the correct grade as per owner's manual. Minimum required 1L.*
- *New oil filter (recommended)*

## Kit Includes:

- *Oil Cooler*
- *Oil lines x 2*
- *Thermostatic sandwich plate*
- *X 2 dowty washers and 2 x – 10 oil line fittings to fit adaptor plate*
- *Oil cooler brackets*
- *Oil line bracket*
- *Oil line separator*
- *8 x M6 pan washer*
- *4 x M6 x 16mm bolts*
- *4 x M6 Nyloc nuts*



## Instructions:

1. Open the bonnet and secure, then jack the car up either with a jack and using axle stands to secure or preferably on a vehicle lift.

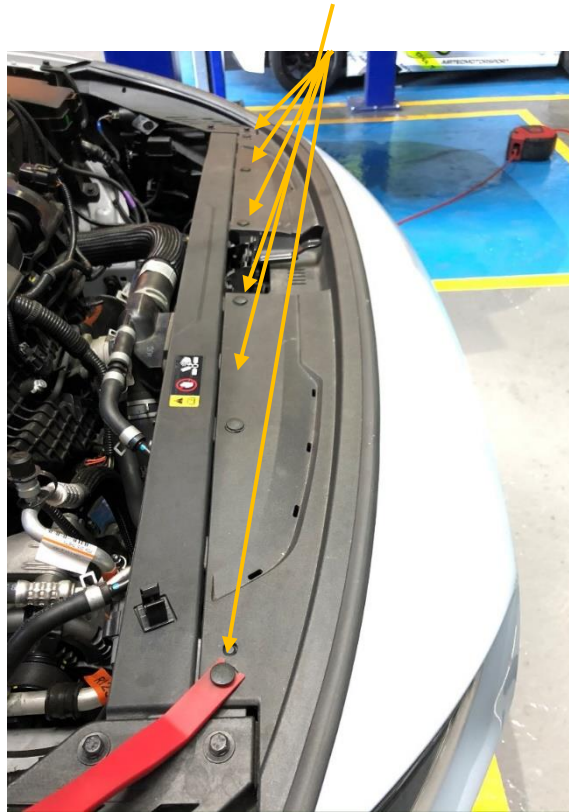
2. Start by removing the undertray from the car by removing the 12 plastic clips using a trim removal tool or flat bladed screwdriver, followed by seven 10mm bolts. The undertray is then removed by sliding it towards the front of the car.



3. In both wheel arches there are 3 plastic clips that need to be removed using a trim tool and then an 8mm bolt.



4. There are 6 plastic clips to be removed along the top of the bumper under the bonnet.



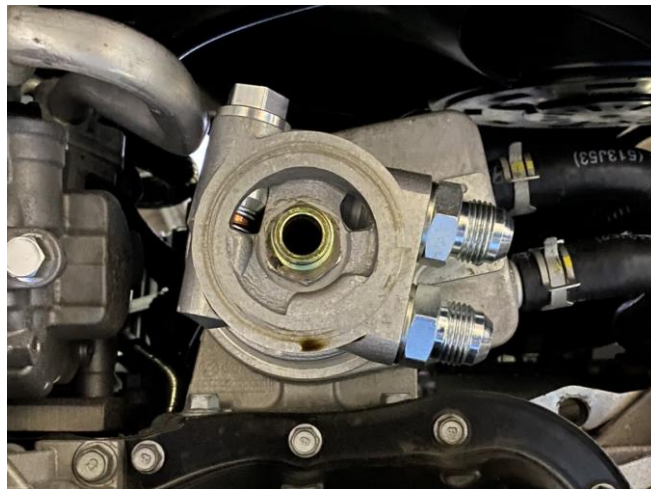
5. The edges of the bumper are now pulled out, best achieved by pulling from the top corner where the bumper meets the front wing and working your way forward with it as it pops out. This is best done with another person doing the other side so that once both sides are pulled forward one person can support the bumper whilst the other disconnects the 3 connectors, 2 on the near side and the other on the off side. The bumper can now come away from the car completely and put aside safely.



6. Remove crash bar by undoing the two 10mm nuts each side followed by the four 12mm bolts each side, then tilt the bar forward and pull out.



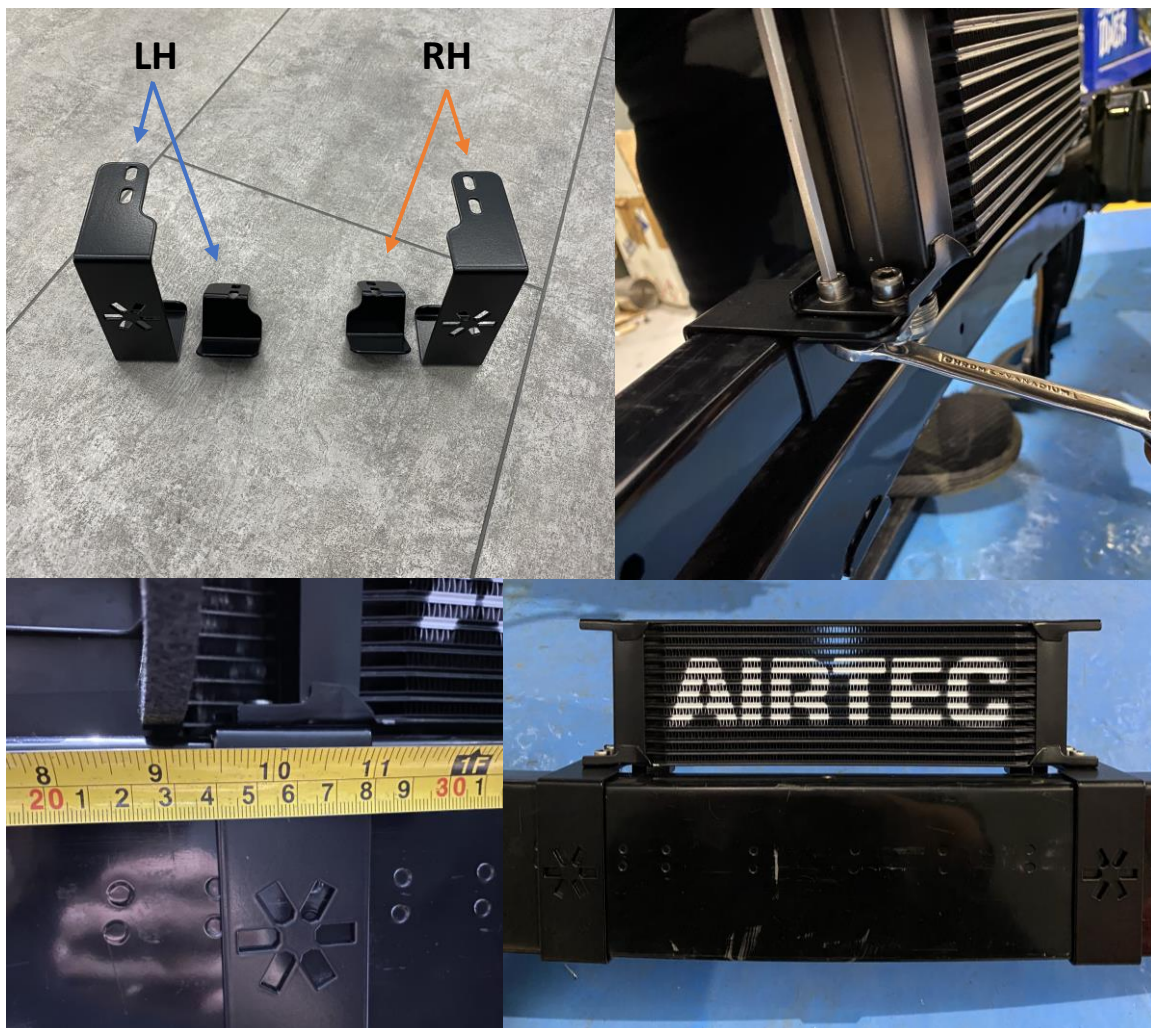
7. Remove oil filter and catch waste oil.
8. Fit sandwich plate using fresh oil on the seal and tighten bolt using 26mm socket, attach oil line fittings with supplied washers and tighten.



9. Fit oil filter, again using fresh oil on the seal and hand tighten.
10. Attach oil lines to oil cooler using an adjustable spanner, the use of a AN-10 aluminium spanner is recommended in order not to damage the finish on the hoses however an adjustable spanner can be used but it is recommended to put some tape around the faces to minimise the risk of scratching.

**11.** Fit oil cooler to crash bar by hooking the bigger of the left hand (LH) brackets under the crash bar and pushing it up so that it clips onto the front of the crash bar. Place the oil cooler on top of the bracket then get the smaller LH bracket and place the two supplied M6 16mm bolts with washers through the holes and then using another washer and supplied Nylock thread on by hand so that the assembly cannot come apart. Then line up the right hand (RH) big bracket and clip onto the crash bar the same as the other side and secure the oil cooler. Then tighten using a 5mm allen key and 10mm spanner.

**From the left hand side of the crash bar the left side of the first bracket must be 240mm so that the oil cooler clears the surround.**



12. Route oil lines above right hand air duct as shown.

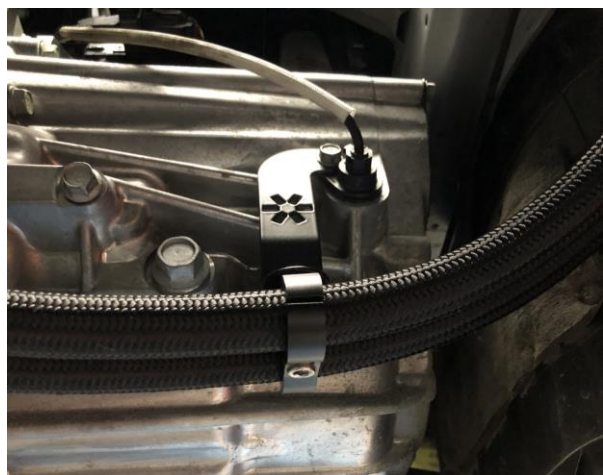


13. Re-attach crash bar using the original fittings, this is best done with a second person so that they can keep the oil lines in the correct place whilst the crash bar is tightened.

14. Attach lines to sandwich plate, again using either an AN-10 aluminium spanner or adjustable spanner.



15. Use bracket to clip oil lines to gearbox by loosening the 10mm bolt enough that the bracket can fit between the gearbox housing and the bolt. Once happy with position tighten. Use the supplied oil line separator to attach the oil lines to the bracket with the supplied bolt.



16. Top up oil.

17. Start car and run until you can feel that the oil cooler is getting warm. This means that the thermostat in the sandwich plate will have opened and that the oil will be flowing through the oil cooler, check all fittings for oil leaks (tighten if necessary) check oil level/top up as needed.

18. Once happy then replace undertray and front bumper in the reverse of steps 1-5.

